

## **Exhibit 9**

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UNITED STATES DISTRICT COURT  
 NORTHERN DISTRICT OF CALIFORNIA  
 OAKLAND DIVISION

In re TWITTER, INC. SECURITIES  
 LITIGATION

Case No. 4:16-cv-05314-JST (SK)  
 (Consolidated with 4:16-cv-05439-JST)

This Document Relates to:  
 ALL ACTIONS

**CLASS ACTION**  
**DECLARATION OF MICHAEL NIERENBERG**

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I, Michael Nierenberg, hereby declare as follows:

1. I have personal knowledge of the facts set forth herein and, if called as a witness, could and would testify competently to them.

2. I have been employed by Twitter Inc. ("Twitter" or the "Company") since October 2013. Currently, I am a Senior Director on the Sales Finance Team, which is the team responsible for revenue forecasting, analytical support for the advertising business, reporting for financial metrics, and process automation. In my role, I manage employees who use data science and predictive analytics to compose revenue forecasts. I also focus on business intelligence tools, like financial dashboards, for managing the advertising business.

3. Prior to my role as Senior Director, I served as Manager, then Senior Manager, of the Sales Finance Team from March 2015 through December 2016. In that role, I managed revenue analytics and forecasting for Japan, Asia Pacific, and emerging markets. I also assisted the worldwide advertising product team in the process of forecasting revenue broken down by specific advertising product. Despite focusing on Asia Pacific and emerging markets, I was involved in Twitter's general process for forecasting revenue.

4. From the time I joined Twitter in September 2013 through March 2015, I was a Senior Financial Analyst. In that role, I was responsible for providing general analytical support to the U.S. mid-market sales team, the product specialist team, and the revenue product and engineering team that builds and maintains our advertising platform. The U.S. mid-market sales team was comprised of sales representatives who focused on selling advertisements to medium sized advertisers within the United States. I assisted this team by interpreting revenue trends, producing forecasts, and providing general financial and analytical support. I also assessed whether individual and aggregate sales projections were reasonable and mathematically supported.

5. The revenue product and engineering team focused on the development and implementation of various advertising products, such as promoted Tweets, promoted accounts, promoted trends, and direct response advertisements. I supported this team by tracking revenue and adoption rates per type of product, and assisting in generating revenue forecasts broken out by product.

1 In particular, I was focused on assisting the teams building the Mobile App Promotion (MAP) and  
2 Direct Response (DR) products.

3 **I. REVENUE FORECASTING.**

4 6. Before, during, and after the Class Period, the Company relied on two parallel  
5 processes for forecasting revenue. The first process involved the use of “time-series” models that  
6 statistically predicted future revenue based on historical revenue performance, seasonality, special  
7 events, and other factors. The main model was an Autoregressive Integrated Moving Average Model  
8 (“ARIMA”), which is a widely used regression model for predicting revenue. Twitter’s ARIMA  
9 model included inputs for revenue by advertising product and region, and ran regressions on our  
10 historical dataset to identify predictive patterns. The model also took into account the impact from  
11 significant events, such as the World Cup, political events, the Super Bowl, and holidays, to separate  
12 one-time factors from the underlying trends. Today I manage the Revenue Forecasting and Analytics  
13 (RFA) team that produces these models. Although I was not a part of that team during the Class  
14 Period, I worked closely with them and provided regular feedback on both the inputs and outputs.

15 7. The second process, which I was closely involved with during the Class Period, was  
16 conducting a “bottoms up” revenue forecast. This process analyzed projected quarterly and annual  
17 “advertising demand,” or how much the Company believed new and existing advertising clients would  
18 purchase in advertisements. Each sales team, with the assistance of Sales Finance, provided a revenue  
19 forecast based on their estimate of annual commitments and budgets from the customers they were  
20 responsible for. These forecasts would then be aggregated globally to calculate a total revenue  
21 forecast. As a part of this process, I was responsible for working with the sales team to analyze and  
22 predict quarterly and annual revenue broken down by region and advertising product. To do that, I  
23 would review historical and anticipated future spending per advertiser, the sales team’s proposed  
24 strategy, and the revenue product and engineering team’s product roadmap. Specifically, before and  
25 during the Class Period, I focused on generating revenue forecasts for direct response advertising  
26 products, which were relatively new during the Class Period, and also the cross-product revenue of  
27 the US Mid-Market Sales (“MMS”) team, which was the top seller of Direct Response products across  
28 the company. Direct response products included website cards (advertisements designed to prompt

1 users to visit the promoter's website) and mobile app promotion ("MAP") (advertisements designed  
2 to prompt users to download the promoter's app).

3 8. I understand that the outputs of these processes would ultimately be provided to  
4 Twitter's Chief Financial Officer and Chief Executive Officer, who would then decide which quarterly  
5 and annual revenue guidance ranges to disclose to the market.

6 9. User metrics such as monthly active users ("MAU") and daily active users ("DAU")  
7 were not inputs into either process described above. The Company would "sanity check" its revenue  
8 forecast with calculations to estimate supply to ensure that it had enough advertising space "supply"  
9 to keep up with demand. During the Class Period, Twitter was not "supply constrained," meaning that  
10 the Company had ample advertising space to satisfy incremental demand. Therefore, Twitter's  
11 revenue forecasts during the Class Period were unaffected by user metrics such as DAU or MAU.

## 12 **II. TWITTER'S REVENUE GUIDANCE.**

13 10. On February 5, 2015, Twitter disclosed Q1 2015 and FY 2015 financial guidance,  
14 including revenue. I recall that the revenue guidance disclosed underwent the process explained above  
15 for forecasting revenue.

16 11. On April 28, 2015, Twitter announced that it missed its Q1 2015 revenue guidance.  
17 The Company also announced Q2 revenue guidance and reduced its FY 2015 revenue guidance. I  
18 recall that the revenue guidance disclosed underwent the process explained above for forecasting  
19 revenue.

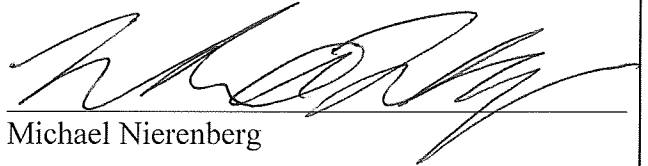
20 12. As an individual responsible for forecasting revenue by advertising product, including  
21 direct response products, I specifically recall the miss was caused by lower-than-expected website  
22 card and MAP performance. Based on documents I reviewed, and consistent with my understanding,  
23 website cards generated \$7.9 million less in revenue than expected and MAP generated \$10.6 million  
24 less in revenue than expected.

25 13. As I recall, the lower-than-expected direct response advertising revenue significantly  
26 reduced the Company's revenue expectations for the rest of 2015, as these products had been the  
27 primary source of expected revenue growth. I recall adjusting down website card and MAP  
28 expectations substantially for Q2, Q3, and Q4 of 2015, from the original guidance Twitter disclosed

1 on February 5, 2015. To the best of my knowledge and recollection, a large majority of the FY 2015  
2 revenue guidance reduction was the result of reduced direct response expectations and the remainder  
3 was the result of unfavorable foreign exchange rates.

4 14. As stated above, user metrics, such as MAU and DAU did not impact Twitter's Q2 or  
5 FY 2015 revenue guidance disclosed on April 28, 2015.

6 I declare under penalty of perjury under the laws of the United States of America that the  
7 foregoing is true and correct. Executed this 12<sup>th</sup> day of September, 2019 in San Francisco, California.

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10 Michael Nierenberg

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